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(54) **OPTICAL CONNECTOR**

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(57) Abstract:

PURPOSE: To ensure the connection between an optical fiber and optical connector, by making at least the inner surface of a ferrule uneven and directly engaging the projecting part of the uneven section with the clad of the plastic-clad optical fiber.

CONSTITUTION: Uneven sections 13 and 14 are respectively installed to the part of the hole 11 for inserting the strand of a plastic-clad optical fiber (PCF) 1 and the other hole 12 for inserting the outer sheath of the PCF1 at the inner surface of a ferrule 10. After the PCF1 is inserted into the ferrule, both end sections of the ferrule, where the uneven surfaces are provided, are contracted in diameter by compression so that the projecting part of the uneven section 13 can bite into the clad layer of the PCF1 and the projecting part of the uneven section 14 can bite into the outer sheath 3 of the PCF1. Therefore, the connection between the connector and PCF is ensured and displacement of the end face of the strand due to the difference in the coefficient of thermal expansion of the core and sheath can be prevented.

